

NOTICE OF INTENT

Department of Environmental Quality
Office of Environmental Assessment

Mercury-Containing Devices and Electronics as Universal Wastes
(LAC 33:V.109, 305, 1501, 2201, 3801, 3806, 3810, 3813, 3821, 3823,
3841, 3843, 3845, 3855, 3877, 4301, and 4911) (HW088)

Under the authority of the Environmental Quality Act, R.S. 30:2001 et seq., and in accordance with the provisions of the Administrative Procedure Act, R.S. 49:950 et seq., the secretary gives notice that rulemaking procedures have been initiated to amend the Hazardous Waste regulations, LAC 33:V.109, 305, 1501, 2201, 3801, 3806, 3810, 3813, 3821, 3823, 3841, 3843, 3845, 3855, 3877, 4301, and 4911 (Log #HW088).

This proposed rule adds mercury-containing devices and electronics, including cathode ray tubes (CRTs), destined for recycling as universal wastes. Under the proposed rule, metallic mercury must be recovered, recycled, reused, or sequestered, and not incinerated, landfilled, or released in any way; electronics, including CRTs, must be sent for dismantling and recovery of components, in a way that prevents releases to the environment. Electronics are the fastest growing portion of the municipal waste stream. In 1988, 20 million computers were discarded as obsolete, and only 11 percent of those were recycled. In 2004, 315 million computers were rendered obsolete in the United States. That equates to 4 billion pounds of plastic, 1 billion pounds of lead, 2 million pounds of cadmium, and 400,000 pounds of mercury. Electronic products are hazardous. They contain lead, mercury, cadmium, zinc, and brominated flame retardants. Televisions and computer monitors contain up to 4 pounds of lead each. Lead is fused with CRT glass as a radiation shield, making it difficult to separate. Currently there is no market for leaded glass. Eight states have already promulgated rules similar to this rule change and have added both electronics/CRTs and mercury-containing devices to their universal waste rules. Two states have taken action to include electronics and/or CRTs as state wastes. Two states have modified their universal waste rules to include mercury-containing devices. The basis and rationale for this proposed rule are to reduce costs and promote recycling by having mercury-containing devices and electronics, including CRTs, included as part of Louisiana's universal waste rule.

This proposed rule meets an exception listed in R.S. 30:2019(D)(2) and R.S. 49:953(G)(3); therefore, no report regarding environmental/health benefits and social/economic costs is required. This proposed rule has no known impact on family formation, stability, and autonomy as described in R.S. 49:972.

A public hearing will be held on September 27, 2005, at 1:30 p.m. in the Galvez Building, Oliver Pollock Conference Room, 602 N. Fifth Street, Baton Rouge, LA 70802. Interested persons are invited to attend and submit oral comments on the proposed amendments. Should individuals with a disability need an accommodation in order to participate, contact Judith A. Schuerman, Ph.D., at the address given below or at (225) 219-3550. Free parking is

available across the street in the Galvez parking garage when the parking ticket is validated by department personnel at the hearing.

All interested persons are invited to submit written comments on the proposed regulation. Persons commenting should reference this proposed regulation by HW088. Such comments must be received no later than October 4, 2005, at 4:30 p.m., and should be sent to Judith A. Schuerman, Ph.D., Office of the Secretary, Legal Affairs and Regulation Development Division, Box 4302, Baton Rouge, LA 70821-4302 or to FAX (225) 219-3582 or by e-mail to judith.schuerman@la.gov. Copies of this proposed regulation can be purchased by contacting the DEQ Public Records Center at (225) 219-3168. Check or money order is required in advance for each copy of HW088. This regulation is available on the Internet at www.deq.louisiana.gov under Rules and Regulations.

This proposed regulation is available for inspection at the following DEQ office locations from 8 a.m. until 4:30 p.m.: 602 N. Fifth Street, Baton Rouge, LA 70802; 1823 Highway 546, West Monroe, LA 71292; State Office Building, 1525 Fairfield Avenue, Shreveport, LA 71101; 1301 Gadwall Street, Lake Charles, LA 70615; 201 Evans Road, Building 4, Suite 420, New Orleans, LA 70123; 111 New Center Drive, Lafayette, LA 70508; 110 Barataria Street, Lockport, LA 70374.

Wilbert F. Jordan, Jr.
Assistant Secretary

Title 33

ENVIRONMENTAL QUALITY

Part V. Hazardous Waste and Hazardous Materials

Subpart 1. Department of Environmental Quality—Hazardous Waste

Chapter 1. General Provisions and Definitions

§109. Definitions

For all purposes of these rules and regulations, the terms defined in this Chapter shall have the following meanings, unless the context of use clearly indicates otherwise.

* * *

Cathode Ray Tube or CRT—a vacuum tube, composed primarily of glass, that is the video display component of a television or computer monitor. An *intact CRT* means a *CRT* remaining within the monitor, whose vacuum has not been released. A *broken CRT* means *CRT* glass removed from the monitor after the vacuum has been released.

* * *

CRT Glass Manufacturing Facility—a facility or part of a facility that uses a furnace to manufacture *CRT* glass.

CRT Processing—conducting all of the following activities:

1. receiving broken or intact CRTs;
2. intentionally breaking intact CRTs or further breaking or separating broken CRTs;
3. sorting or otherwise managing glass removed from CRTs; and
4. cleaning the coatings off the glass removed from CRTs.

* * *

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 11:1139 (December 1985), LR 12:319 (May 1986), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 13:651 (November 1987), LR 14:790, 791 (November 1988), LR 15:378 (May 1989), LR 15:737 (September 1989), LR 16:218, 220 (March 1990), LR 16:399 (May 1990), LR 16:614 (July 1990), LR 16:683 (August 1990), LR 17:362 (April 1991), LR 17:478 (May 1991), LR 18:723 (July 1992), LR 18:1375 (December 1992), repromulgated by the Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 19:626 (May 1993), amended LR 20:1000 (September 1994), LR 20:1109 (October 1994), LR 21:266 (March 1995), LR 21:944 (September 1995), LR 22:814 (September 1996), LR 23:564 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:655 (April 1998), LR 24:1101 (June 1998), LR 24:1688 (September 1998), LR 25:433 (March 1999), repromulgated LR 25:853 (May 1999), amended by the Office of Environmental

Assessment, Environmental Planning Division, LR 26:269 (February 2000), LR 26:2465 (November 2000), LR 27:291 (March 2001), LR 27:708 (May 2001), LR 28:999 (May 2002), LR 28:1191 (June 2002), LR 29:318 (March 2003), amended by the Office of Environmental Assessment, LR 31:**.

Chapter 3. General Conditions for Treatment, Storage, and Disposal Facility Permits

§305. Scope of the Permit

A. - C.11.b. ...

- c. mercury-containing equipment as described in LAC 33:V.3806;
- ~~d.~~ thermostats as described in LAC 33:V.3807;
- ~~e.~~ lamps as described in LAC 33:V.3809; ~~and~~
- f. electronics as described in LAC 33:V.3810; and
- ge. antifreeze as described in LAC 33:V.3811;

C.12. - H. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:84 (February 1987), LR 13:433 (August 1987), LR 16:220 (March 1990), LR 16:614 (July 1990), LR 17:658 (July 1991), LR 20:1000 (September 1994), LR 20:1109 (October 1994), LR 21:944 (September 1995), LR 23:567 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1105 (June 1998), LR 24:1690, 1759 (September 1998), LR 25:435 (March 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:708 (May 2001), amended by the Office of Environmental Assessment, LR 31:**.

Chapter 15. Treatment, Storage, and Disposal Facilities

§1501. Applicability

A. - C.11.b. ...

- c. mercury-containing equipment as described in LAC 33:V.3806;
- ~~d.~~ thermostats as described in LAC 33:V.3807;
- ~~e.~~ lamps as described in LAC 33:V.3809; ~~and~~
- f. electronics as described in LAC 33:V.3810; and
- ge. antifreeze as described in LAC 33:V.3811; or

C.12. - H.13. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 18:1256 (November 1992), LR 21:266 (March 1995), LR 21:944 (September 1995), LR 23:565, 568 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1106 (June 1998), LR 24:1694, 1759 (September 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:277 (February 2000), LR 27:711 (May 2001), amended by the Office of Environmental Assessment, LR 31:**.

Chapter 22. Prohibitions on Land Disposal

Subchapter A. Land Disposal Restrictions

§2201. Purpose, Scope, and Applicability

A. - I.5.b. ...

- c. mercury-containing equipment as described in LAC 33:V.3806;
- de. thermostats as described in LAC 33:V.3807;
- ed. lamps as described in LAC 33:V.3809; and
- f. electronics as described in LAC 33:V.3810; and
- ge. antifreeze as described in LAC 33:V.3811.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 15:378 (May 1989), amended LR 16:398 (May 1990), LR 16:1057 (December 1990), LR 17:658 (July 1991), LR 18:723 (July 1992), LR 21:266 (March 1995), LR 22:22 (January 1996), LR 23:568 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:300 (February 1998), LR 24:666 (April 1998), LR 24:1107 (June 1998), LR 24:1724 (September 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1799 (October 1999), LR 27:711 (May 2001), amended by the Office of Environmental Assessment, LR 31:**.

Chapter 38. Universal Wastes

Subchapter A. General

§3801. Scope and Applicability

A. This Chapter establishes requirements for managing batteries as described in LAC 33:V.3803, pesticides as described in LAC 33:V.3805, mercury-containing equipment as described in LAC 33:V.3806, thermostats as described in LAC 33:V.3807, lamps as described in LAC 33:V.3809, electronics as described in LAC 33:V.3810, and antifreeze as described in LAC 33:V.3811. This Chapter provides an alternative set of management standards in lieu of regulations under LAC 33:V.Subpart 1.

B. – D. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 23:568 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1108 (June 1998), LR 24:1496 (August 1998), LR 24:1759 (September 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:712 (May 2001), repromulgated LR 27:1518 (September 2001), amended by the Office of Environmental Assessment, LR 31:**.

§3806. Applicability—Mercury-Containing Equipment

A. Mercury-Containing Equipment Covered under This Chapter. The requirements of this Chapter apply to persons managing mercury-containing equipment as described in LAC 33:V.3813, except equipment listed in Subsection B of this Section. Discarded mercury-containing equipment that is not managed under LAC 33:V.Chapter 41 is subject to management under this Chapter.

B. Mercury-Containing Equipment Not Covered under This Chapter. The requirements of this Chapter do not apply to persons managing the following categories of mercury-containing equipment:

1. discarded mercury-containing equipment that is managed under LAC 33:V.Chapter 41;
2. mercury-containing equipment, as described in LAC 33:V.3813, that is not yet waste under LAC 33:V.4901, including equipment that does not meet the criteria for waste generation in Subsection C of this Section; and
3. mercury-containing equipment, as described in this Chapter, that is not hazardous waste. Mercury-containing equipment is hazardous waste if it exhibits one or more of the characteristics identified in LAC 33:V.4903.

C. Generation of Waste Mercury-Containing Equipment

1. Used mercury-containing equipment becomes a waste on the date it is discarded (e.g., when sent for reclamation).
2. Unused mercury-containing equipment becomes a waste on the date the handler decides to discard it.
3. Mercury-containing equipment is a universal waste if destined for recycling.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, LR 31:**.

§3810. Applicability—Electronics

A. Electronics Covered under This Chapter. The requirements of this Chapter apply to persons managing electronics as described in LAC 33:V.3813, except material listed in Subsection B of this Section. Discarded electronics not managed under LAC 33:V.Chapter 41 are subject to management under this Chapter.

B. Electronics Not Covered under This Chapter. The requirements of this Chapter do not apply to persons managing the following categories of electronics:

1. discarded electronics that are managed under LAC 33:V.Chapter 41;
2. electronics, as described in LAC 33:V.3813, that are not yet wastes under LAC 33:V.4901, including those that do not meet the criteria for waste generation in Subsection C of this Section; and
3. electronics, as described in this Chapter, that are not hazardous waste. Electronics are hazardous waste if they exhibit one or more of the characteristics identified in LAC 33:V.4903.

C. Generation of Waste Electronics

1. An electronic device becomes a waste on the date it is discarded (e.g., when sent for reclamation).

2. An unused electronic device becomes a waste on the date the handler decides to discard it.

3. An electronic device is a universal waste if destined for recycling or dismantling.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, LR 31:**.

§3813. Definitions

* * *

Destination Facility—a facility that treats, disposes of, or recycles a particular category of universal waste, except those management activities described in LAC 33:V.3821.A and C and 3843.A and C. A facility at which a particular category of universal waste is only accumulated, is not a destination facility for purposes of managing that category of universal waste. A facility that shreds, crushes, heats, or otherwise treats electronic devices or any component thereof, shall be considered a destination facility. A facility shall not be considered a destination facility if it engages in the disassembly or demanufacturing of electronics:

1. for the purpose of marketing, reselling, reusing, or recycling the components of the electronic devices; and

2. without treating the electronic devices or any component thereof.

Electronics or Electronic Device—a device or a component thereof that contains one or more circuit boards and is used primarily for data transfer or storage, communication, or entertainment purposes, including but not limited to, desktop and laptop computers, computer peripherals, monitors, copying machines, scanners, printers, radios, televisions, camcorders, video cassette recorders (VCRs), compact disc players, digital video disc players, MP3 players, telephones, including cellular and portable telephones, and stereos.

* * *

Large Quantity Handler of Universal Waste—a universal waste handler (as defined in this Section) who accumulates 5,000 kilograms or more total of universal waste (batteries, pesticides, mercury-containing equipment, thermostats, lamps, electronics, or antifreeze, calculated collectively) at any time. This designation as a *large quantity handler of universal waste* is retained through the end of the calendar year in which 5,000 kilograms or more total of universal waste is accumulated.

Mercury-Containing Equipment—a device or part of a device (excluding batteries, thermostats, and lamps) that contains elemental mercury necessary for its operation.

* * *

Small Quantity Handler of Universal Waste—a universal waste handler (as defined in this Section) who does not accumulate 5,000 kilograms or more total of universal waste (batteries, pesticides, mercury-containing equipment, thermostats, lamps, electronics, or

antifreeze, calculated collectively) at any time.

* * *

Universal Waste—any of the following hazardous wastes that are subject to the universal waste requirements of this Chapter:

1. - 2. ...
3. mercury-containing equipment as described in LAC 33:V.3806;
43. thermostats as described in LAC 33:V.3807;
54. lamps as described in LAC 33:V.3809; and
6. electronics as described in LAC 33:V.3810; and
75. antifreeze as described in LAC 33:V.3811.

* * *

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 23:570 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1760 (September 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:287 (February 2000), LR 27:302 (March 2001), amended by the Office of Environmental Assessment, LR 31:**.

Subchapter B. Standards for Small Quantity Handlers of Universal Waste

§3821. Waste Management

A. – B.4. ...

C. Universal Waste Thermostats and Mercury-Containing Equipment. A small quantity handler of universal waste ~~shall~~must manage universal waste thermostats or mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

1. a small quantity handler of universal waste ~~shall~~must contain any universal waste thermostat or mercury-containing equipment that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container ~~shall~~must be closed, structurally sound, compatible with the contents of the thermostat or mercury-containing equipment, and ~~shall~~must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

2. a small quantity handler of universal waste may remove mercury-containing ampules from universal waste thermostats or mercury-containing equipment, provided the handler:

a. – h. ...

3. a small quantity handler of universal waste who removes mercury-containing ampules from thermostats or mercury-containing equipment ~~shall~~must determine whether the mercury or clean-up residues resulting from spills or leaks, and/or other solid waste generated as a result of the removal of mercury-containing ampules (e.g., remaining thermostat units or mercury-containing equipment) exhibit a characteristic of hazardous waste identified in

LAC 33:V.4903:

C.3.a. – D.2. ...

E. Universal Waste Electronics. A small quantity handler of universal waste shall manage universal waste electronics in a way that prevents the release of any universal waste, component of a universal waste, or constituent of a universal waste to the environment, as follows:

1. store all universal waste electronics inside a building with a roof and four walls or in the cargo-carrying portion of a truck, such as in a trailer, in a manner that prevents universal waste electronics from being exposed to the environment and ensures that all universal waste electronics are handled, stored, and transported in a manner that maintains the reuse or recyclability of any such device or component thereof;

2. immediately clean up and place in a container any broken cathode ray tube from a universal waste electronic device. Any such container shall be closed, structurally sound, and compatible with the cathode ray tube and shall be capable of preventing leakage, spillage, or releases of broken cathode ray tubes, glass particles, or other hazardous constituents from such broken tubes, to the environment;

3. shall not shred, crush, heat, or otherwise treat electronics or any component thereof, and shall not break the cathode ray tube in any electronic device. Provided no treatment is occurring, a small quantity handler of universal waste electronics may disassemble electronics for the sole purpose of marketing, reselling, reusing, or recycling components thereof.

FE. Universal Waste Antifreeze. A small quantity handler of universal waste shall~~must~~ manage universal waste antifreeze in a way that prevents releases of any universal waste or component of a universal waste to the environment. The universal waste antifreeze ~~shall~~~~must~~ be contained in one or more of the following:

1. a container that remains closed, structurally sound, and compatible with the antifreeze and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

2. a container that does not meet the requirements of Paragraph ~~FE~~.1 of this Section, provided that the unacceptable container is overpacked in a container that does meet the requirements of Paragraph ~~FE~~.1 of this Section;

3. a tank that meets the requirements of LAC 33:V.1915.C; or

4. a transport vehicle or vessel that is closed, structurally sound, and compatible with the antifreeze and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 23:571 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1760 (September 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:302 (March 2001), amended by the Office of Environmental Assessment LR 31:**.

§3823. Labeling/Marking

A. – A.3.b. ...

4. Universal waste thermostats or mercury-containing equipment (e.g., each thermostat or mercury-containing device), or a container in which the mercury-containing equipment or thermostats are contained, ~~shall~~must be labeled or marked clearly with any one of the following phrases: "Universal Waste—Mercury Thermostat(s)," or "Waste Mercury Thermostat(s)," or "Used Mercury ~~Thermostat(s)~~;" or "Universal Waste—Mercury-Containing Equipment," or "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."

5. ...

6. Universal waste electronics, or a container in which the electronics are contained, or each electronic device, package, or pallet containing universal waste electronics, shall be labeled or marked clearly with one of the following phrases: "Universal Waste—Electronics," or "Waste Electronics," or "Used Electronics."

76. Universal waste antifreeze, or a container in which the antifreeze is contained, ~~shall~~must be labeled or marked clearly with any one of the following phrases: "Universal Waste—Antifreeze," or "Waste Antifreeze," or "Used Antifreeze."

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 23:572 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1761 (September 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:303 (March 2001), amended by the Office of Environmental Assessment, LR 31:***.

Subchapter C. Standards for Large Quantity Handlers of Universal Waste

§3841. Notification

A. – B.3. ...

4. a list of all of the types of universal waste managed by the handler (e.g., batteries, pesticides, mercury-containing equipment, thermostats, lamps, electronics, antifreeze); and

5. a statement indicating that the handler is accumulating more than 5,000 kilograms of universal waste at one time and the types of universal waste (e.g., batteries, pesticides, mercury-containing equipment, thermostats, lamps, electronics, antifreeze) the handler is accumulating above this quantity.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 23:574 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1761 (September 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2496 (November 2000), amended by the Office of Environmental Assessment, LR 31:***.

§3843. Waste Management

A. – B.4. ...

C. Universal Waste Thermostats and Mercury-Containing Equipment. A large quantity handler of universal waste ~~shall~~must manage universal waste thermostats or mercury-containing equipment in a way that prevents releases of any universal waste or component of a universal waste to the environment, as follows:

1. a large quantity handler of universal waste ~~shall~~must contain any universal waste thermostat or mercury-containing equipment that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a container. The container ~~shall~~must be closed, structurally sound, compatible with the contents of the thermostat or mercury-containing equipment, and ~~shall~~must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;

2. a large quantity handler of universal waste may remove mercury-containing ampules from universal waste thermostats or mercury-containing equipment provided the handler:

a. – h. ...

3. a large quantity handler of universal waste who removes mercury-containing ampules from thermostats or mercury-containing equipment ~~shall~~must determine whether the mercury or clean-up residues resulting from spills or leaks and/or other solid waste generated as a result of the removal of mercury-containing ampules (e.g., remaining thermostat units or mercury-containing equipment) exhibit a characteristic of hazardous waste identified in LAC 33:V.4903:

C.3.a. – D.2. ...

E. Universal Waste Electronics. A large quantity handler of universal waste shall manage universal waste electronics in a way that prevents the release of any universal waste, component of a universal waste, or constituent of a universal waste to the environment, as follows:

1. store all universal waste electronics inside a building with a roof and four walls or in the cargo-carrying portion of a truck, such as in a trailer, in a manner that prevents universal waste electronics from being exposed to the environment and ensures that all universal waste electronics are handled, stored, and transported in a manner that maintains the reuse or recyclability of any such device or component thereof;

2. immediately clean up and place in a container any broken cathode ray tube from a universal waste electronic device. Any such container shall be closed, structurally sound, and compatible with the cathode ray tube and shall be capable of preventing leakage, spillage, or releases of broken cathode ray tubes, glass particles, or other hazardous constituents from such broken tubes, to the environment;

3. shall not shred, crush, heat, or otherwise treat electronics or any component thereof, and shall not break the cathode ray tube in any electronic device. Provided no treatment is occurring, a large quantity handler of universal waste electronics may disassemble electronics for the sole purpose of marketing, reselling, reusing, or recycling components thereof.

~~FE.~~ Universal Waste Antifreeze. A large quantity handler of universal waste ~~shall~~must manage universal waste antifreeze in a way that prevents releases of any universal waste or

component of a universal waste to the environment. The universal waste antifreeze ~~shall~~must be contained in one or more of the following:

1. a container that remains closed, structurally sound, and compatible with the antifreeze and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions;
2. a container that does not meet the requirements of Paragraph ~~FE~~.1 of this Section, provided that the unacceptable container is overpacked in a container that does meet the requirements of Paragraph ~~FE~~.1 of this Section;
3. a tank that meets the requirements of LAC 33:V.Chapter 19, except for LAC 33:V.1915.C;
4. a transport vehicle or vessel that is closed, structurally sound, and compatible with the antifreeze and that lacks evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 23:574 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1761 (September 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:303 (March 2001), amended by the Office of Environmental Assessment, LR 31:**.

§3845. Labeling/Marking

A. – A.3.b. ...

4. Universal waste thermostats or mercury-containing equipment (e.g., each thermostat or mercury-containing device), or a container or tank in which the mercury-containing equipment or thermostats are contained, ~~shall~~must be labeled or marked clearly with any one of the following phrases: "Universal Waste—Mercury Thermostat(s);" or "Waste Mercury Thermostat(s);" or "Used Mercury Thermostat(s);" or "Universal Waste—Mercury-Containing Equipment," or "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."

5. Each lamp or a container or package in which such lamps are contained ~~shall~~must be labeled or marked clearly with any one of the following phrases: "Universal Waste—Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."

6. Universal waste electronics, or a container in which the electronics are contained, or each electronic device, package, or pallet containing universal waste electronics, shall be labeled or marked clearly with one of the following phrases: "Universal Waste—Electronics," or "Waste Electronics," or "Used Electronics."

76. Universal waste antifreeze, or a container in which the antifreeze is contained, ~~shall~~must be labeled or marked clearly with any one of the following phrases: "Universal Waste—Antifreeze," or "Waste Antifreeze," or "Used Antifreeze."

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 23:575 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1761 (September

1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:303 (March 2001), amended by the Office of Environmental Assessment, LR 31:**.

§3855. Tracking Universal Waste Shipments

A. – A.1. ...

2. the quantity of each type of universal waste received (e.g., batteries, pesticides, mercury-containing equipment, thermostats, lamps, electronics, antifreeze); and

A.3. – B.1. ...

2. the quantity of each type of universal waste sent (e.g., batteries, pesticides, mercury-containing equipment, thermostats, lamps, electronics, antifreeze); and

B.3. – C.2. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 23:576 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1762 (September 1998), amended by the Office of Environmental Assessment, LR 31:**.

Subchapter E. Standards for Destination Facilities

§3877. Tracking Universal Waste Shipments

A. - A.1. ...

2. the quantity of each type of universal waste received (e.g., batteries, pesticides, mercury-containing equipment, thermostats, lamps, electronics, antifreeze); and

A.3. – B. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 23:578 (May 1997), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1762 (September 1998), amended by the Office of Environmental Assessment, LR 31:**.

Chapter 43. Interim Status

§4301. Purpose and Applicability

A. – C.13.b. ...

c. mercury-containing equipment as described in LAC 33:V.3806;

de. thermostats as described in LAC 33:V.3807;

ed. lamps as described in LAC 33:V.3809;~~and~~

- f. electronics as described in LAC 33:V.3810; and
- ge. antifreeze as described in LAC 33:V.3811;

C.14. – I. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Solid and Hazardous Waste, Hazardous Waste Division, LR 10:200 (March 1984), amended LR 10:496 (July 1984), LR 13:84 (February 1987), LR 16:220 (March 1990), LR 17:362 (April 1991), LR 18:1256 (November 1992), LR 20:1000 (September 1994), LR 21:266 (March 1995), amended by the Office of Waste Services, Hazardous Waste Division, LR 24:1743 (September 1998), LR 25:482 (March 1999), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 25:1466 (August 1999), LR 26:2498 (November 2000), LR 27:713 (May 2001), amended by the Office of Environmental Assessment, LR 31:**.

Chapter 49. Lists of Hazardous Wastes

[Comment: Chapter 49 is divided into two sections: Category I Hazardous Wastes, which consist of Hazardous Wastes from nonspecific and specific sources (F and K wastes), Acute Hazardous Wastes (P wastes), and Toxic Wastes (U wastes) (LAC 33:V.4901); and Category II Hazardous Wastes, which consist of wastes ~~that~~^{which} are ignitable, corrosive, reactive, or toxic (LAC 33:V.4903).]

§4911. Conditional Exclusion for Broken Cathode Ray Tubes (CRTs) Undergoing Recycling

A. Prior to processing, broken CRTs are not solid wastes if they are destined for recycling and if they meet the following requirements.

1. Storage. The broken CRTs shall be either:
 - a. stored in a building with a roof, floor, and walls; or
 - b. placed in a container (i.e., a package or a vehicle) that is constructed, filled, and closed to minimize identifiable releases to the environment of CRT glass (including fine solid materials).
2. Labeling. Each container in which broken CRT material is contained shall be labeled or marked clearly with one of the following phrases: "Waste Cathode Ray Tube(s)—Contains Leaded Glass," or "Used Cathode Ray Tube(s)—Contains Leaded Glass." It shall also be labeled: "Do Not Mix with Other Glass Materials."
3. Transportation. These CRTs shall be transported in a container meeting the requirements of Subparagraph A.1.b and Paragraph A.2 of this Section.
4. Speculative Accumulation. These CRTs are subject to the limitations on speculative accumulation as defined in LAC 33:V.109.

B. Requirements for Processing of Broken CRTs. Broken CRTs undergoing CRT processing as defined in LAC 33:V.109 are not solid wastes if they meet the following requirements.

1. Storage. Broken CRTs undergoing processing are subject to the requirements of Paragraphs A.1, 2, and 4 of this Section.
2. Processing. All CRTs shall be processed within a building with a roof, floor, and walls. No activities may be performed that use temperatures high enough to

volatilize lead from CRTs.

C. Processed CRT Glass Sent to CRT Glass Making or Lead Smelting. Glass removed from used CRTs that is destined for recycling at a CRT glass manufacturing facility or a lead smelter after processing is not a solid waste unless it is speculatively accumulated as defined in LAC 33:V.109. Imported, processed glass from CRTs is subject to these requirements as soon as it enters this state.

D. Processed CRT Glass Sent to Other Types of Recycling, except for Use Constituting Disposal. Glass removed from CRTs that is destined for other types of recycling after processing (except use constituting disposal) is not a solid waste if it meets the requirements of Paragraphs A.1-4 of this Section. Imported, processed glass removed from CRTs is subject to these requirements as soon as it enters this state.

E. Use Constituting Disposal. Processed glass removed from CRTs that is used in a manner constituting disposal shall comply with the requirements of Paragraphs A.1-4 of this Section and the applicable requirements of LAC 33:V.4139. Imported, processed glass from CRTs is subject to these requirements as soon as it enters this state.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and in particular R.S. 30:2180 et seq.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of Environmental Assessment, LR 31:**.

**FISCAL AND ECONOMIC IMPACT STATEMENT
FOR ADMINISTRATIVE RULES**LOG #: HW088

Person

Preparing

Statement: John RogersDept.: Environmental QualityPhone: (225) 219-3266Office: Environmental Services

Return

Address: DEQ
PO Box 4313
Baton Rouge, La 70821-4313

Rule

Title: Mercury-Containing Devices and
Electronics as Universal Wastes
(LAC 33.V.109, 305, 1501, 2201, 3801,
3806, 3810, 3813, 3821, 3823, 3841,
3843, 3845, 3855, 3877, 4301, and 4911)

Date Rule

Takes Effect: Upon promulgation**SUMMARY**

(Use complete sentences)

In accordance with Section 953 of Title 49 of the Louisiana Revised Statutes, there is hereby submitted a fiscal and economic impact statement on the rule proposed for adoption, repeal or amendment. THE FOLLOWING STATEMENTS SUMMARIZE ATTACHED WORKSHEETS, I THROUGH IV AND WILL BE PUBLISHED IN THE LOUISIANA REGISTER WITH THE PROPOSED AGENCY RULE.

I. ESTIMATED IMPLEMENTATION COSTS (SAVINGS) TO STATE OR LOCAL GOVERNMENTAL UNITS (Summary)

No significant costs to state or local governments are anticipated as a result of the proposed rule.

II. ESTIMATED EFFECT ON REVENUE COLLECTIONS OF STATE OR LOCAL GOVERNMENTAL UNITS (Summary)

There should be no significant effect on current revenue collections of state and local governments as a result of the proposed rule.

III. ESTIMATED COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS OR NON-GOVERNMENTAL GROUPS (Summary)

A cost savings is anticipated. Generators of waste electronics, cathode ray tubes and mercury-containing devices will benefit to the extent that they avoid the higher costs of hazardous waste regulation, including hazardous waste transportation, fees, and the hazardous waste disposal tax.

IV. ESTIMATED EFFECT ON COMPETITION AND EMPLOYMENT (Summary)

Adoption of this addition will ease the regulatory burden on industry. Competition will not be significantly affected since all business must follow the same rules. Employment in the recycling industry will be stimulated as the proposed additions are tied to recycling the materials.

Signature of Agency Head or Designee

Legislative Fiscal Officer or DesigneeWilbert F. Jordan, Jr., Assistant Secretary

Typed Name and Title of Agency Head or Designee

Date of Signature

Date of Signature

LFO 03/09/2001

FISCAL AND ECONOMIC IMPACT STATEMENT FOR ADMINISTRATIVE RULES

The following information is requested in order to assist the Legislative Fiscal Office in its review of the fiscal and economic impact statement and to assist the appropriate legislative oversight subcommittee in its deliberation on the proposed rule.

- A. Provide a brief summary of the content of the rule (if proposed for adoption, or repeal) or a brief summary of the change in the rule (if proposed for amendment). Attach a copy of the notice of intent and a copy of the rule proposed for initial adoption or repeal (or, in the case of a rule change, copies of both the current and proposed rules with amended portions indicated).

The proposed rule adds mercury-containing devices and electronics, including cathode ray tubes (CRTs), to the category of "universal wastes," which are destined for recycling and as to which the requirements are less stringent than those for other hazardous wastes. Under the proposed universal waste rule, metallic mercury must be recovered, recycled, reused or sequestered, not incinerated, landfilled or released in any way. Electronics, including CRTs, must be sent for dismantling and recovery of components, in a way that prevents releases to the environment.

- B. Summarize the circumstances which require this action. If the Action is required by federal regulation, attach a copy of the applicable regulation.

Electronics are the fastest growing portion of the municipal waste stream. In 1988, only 20 million computers were discarded as obsolete and only 11% of those were recycled. In 2004, 315 million computers were rendered obsolete in the US. That equates to 4 billion pounds of plastic, 1 billion pounds of lead, 2 million pounds of cadmium, and 400,000 pounds of mercury. Electronic products are hazardous. They contain lead, mercury, cadmium, zinc, and brominated flame retardants. Televisions and computer monitors contain up to 4 pounds of lead each. Lead is fused with the CRT glass as a radiation shield, making it difficult to separate. Currently there is no market for leaded glass. Eight states have already promulgated rules similar to this proposed change and have added both electronics/CRTs and mercury-containing devices to their state universal waste rules. Two states have taken action to include electronics and/or CRTs as "state wastes". Two states have modified their universal waste rules to include mercury-containing devices.

- C. Compliance with Act 11 of the 1986 First Extraordinary Session
(1) Will the proposed rule change result in any increase in the expenditure of funds? If so, specify amount and source of funding.

No. The proposed rule is not expected to result in an increase in the expenditure of funds.

- (2) If the answer to (1) above is yes, has the Legislature specifically appropriated the funds necessary for the associated expenditure increase?

(a) ____ Yes. If yes, attach documentation.

(b) ____ No. If no, provide justification as to why this rule change should be published at this time.

This question is not applicable.

FISCAL AND ECONOMIC IMPACT STATEMENT**WORKSHEET****I. A. COSTS OR SAVINGS TO STATE AGENCIES RESULTING FROM THE ACTION PROPOSED**

1. What is the anticipated increase (decrease) in costs to implement the proposed action?

COSTS	FY 05-06	FY 06-07	FY 07-08
PERSONAL SERVICES	0	0	0
OPERATING EXPENSES			
PROFESSIONAL SERVICES			
OTHER CHARGES			
EQUIPMENT			
TOTAL	0	0	0
MAJOR REPAIR & CONSTR.	0	0	0
POSITIONS (#)	0	0	0

2. Provide a narrative explanation of the costs or savings shown in "A.1.", including the increase or reduction in workload or additional paperwork (number of new forms, additional documentation, etc.) anticipated as a result of the implementation of the proposed action. Describe all data, assumptions, and methods used in calculating these costs.

This question is not applicable.

3. Sources of funding for implementing the proposed rule or rule change.

SOURCE	FY 05-06	FY 06-07	FY 07-08
STATE GENERAL FUND			
AGENCY SELF-GENERATED			
DEDICATED			
FEDERAL FUNDS			
OTHER (Specify)			
TOTAL	0	0	0

4. Does your agency currently have sufficient funds to implement the proposed action? If not, how and when do you anticipate obtaining such funds?

No additional funds are necessary to implement this rule.

B. COST OR SAVINGS TO LOCAL GOVERNMENTAL UNITS RESULTING FROM THE ACTION PROPOSED.

1. Provide an estimate of the anticipated impact of the proposed action on local governmental units, including adjustments in workload and paperwork requirements. Describe all data, assumptions and methods used in calculating this impact.

Local governments are not expected to be significantly impacted as a result of the implementation of this rule.

2. Indicate the sources of funding of the local governmental unit which will be affected by these costs or savings.

This does not apply.

FISCAL AND ECONOMIC IMPACT STATEMENT**WORKSHEET****II. EFFECT ON REVENUE COLLECTIONS OF STATE AND LOCAL GOVERNMENTAL UNITS**

- A. What increase (decrease) in revenues can be anticipated from the proposed action?

REVENUE INCREASE/DECREASE	FY 05-06	FY 06-07	FY 07-08
STATE GENERAL FUND	0	0	0
AGENCY SELF-GENERATED			
RESTRICTED FUNDS*			
FEDERAL FUNDS			
LOCAL FUNDS			
TOTAL	0	0	0

*Specify the particular fund being impacted.

- B. Provide a narrative explanation of each increase or decrease in revenues shown in "A." Describe all data, assumptions, and methods used in calculating these increases or decreases.

Revenue collections of state and local governmental units are not expected to be significantly impacted as a result of the implementation of this rule.

III. COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS OR NONGOVERNMENTAL GROUPS

- A. What persons or non-governmental groups would be directly affected by the proposed action? For each, provide an estimate and a narrative description of any effect on costs, including workload adjustments and additional paperwork (number of new forms, additional documentation, etc.), they may have to incur as a result of the proposed action.

Generators of waste electronics, cathode ray tubes, and mercury-containing devices will benefit as it will be less expensive to handle these items as universal wastes than as hazardous wastes. Recycling and dismantling facilities are exempted and should find their business increasing. Documentation requirements for universal wastes are minimal and far less than for hazardous waste. Therefore a reduction in business and government paperwork is anticipated.

- B. Also provide an estimate and a narrative description of any impact on receipts and/or income resulting from this rule or rule change to these groups.

No impact on receipts or income from this rule is foreseen.

IV. EFFECTS ON COMPETITION AND EMPLOYMENT

Identify and provide estimates of the impact of the proposed action on competition and employment in the public and private sectors. Include a summary of any data, assumptions and methods used in making these estimates.

A slight increase is anticipated in competition among private sector universal waste handlers for computer and electronics materials due to a demand for these types of materials. Making electronics and cathode ray tubes universal wastes reduces some of the regulatory constraints on this industry. No change is foreseen in the public sector.